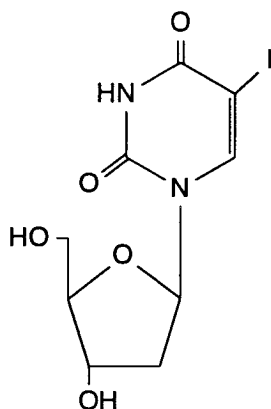


# IODODEOXYURIDINE

NSC - 39661



**Chemical Name:**

2'-Deoxy-5-iodouridine

**Other Names:**

Idoxuridine (USAN); 5-IUdR

**CAS Registry Number:** 54-42-2

**Molecular Formula:**  $C_9H_{11}IN_2O_5$

**M.W.:** 354.1

**Approximate Solubility:**

(mg/mL)

0.1 N NaOH

30

0.1 N HCL

2

H<sub>2</sub>O

2

**Stability:****Bulk:**

No changes were found in material stored at room temperature and at 60 °C for 28 days.

**Solution:**

An aqueous solution (2 mg/mL) shows no decomposition after 24 hours at room temperature (UV and paper chromatography).

**Ultraviolet Absorption:**

(Water)

$$\lambda_{\max} = 288 \pm 2 \text{ nm}$$

$$\epsilon = 7,500 - 7,800$$

**High Performance Liquid Chromatography:**

**Column:** 4.6 mm i.d. x 25 cm Alltech Spherisorb S5 ODS

**Mobile Phase:** 2% CH<sub>3</sub>CN in water

**Flow Rate:** 2.5 mL/min

**Detection:** UV at 254 nm

**Sample Preparation:** 1 mg/mL in water or internal standard solution

**Internal Standard:** adenosine (0.3 mg/mL in 0.01 N NaOH)

**Retention Volume:** 31 mL (NSC - 39661)  
36 mL (I.S.)

**Toxicity Data:**

Rat(ip): LD<sub>50</sub>: 4000 mg/kg

Advances in Teratology, 3,181,(1968)

Mouse(ip): LD<sub>50</sub>: 1000 mg/kg

Journal of the National Cancer Institute, 62,911,(1979)